

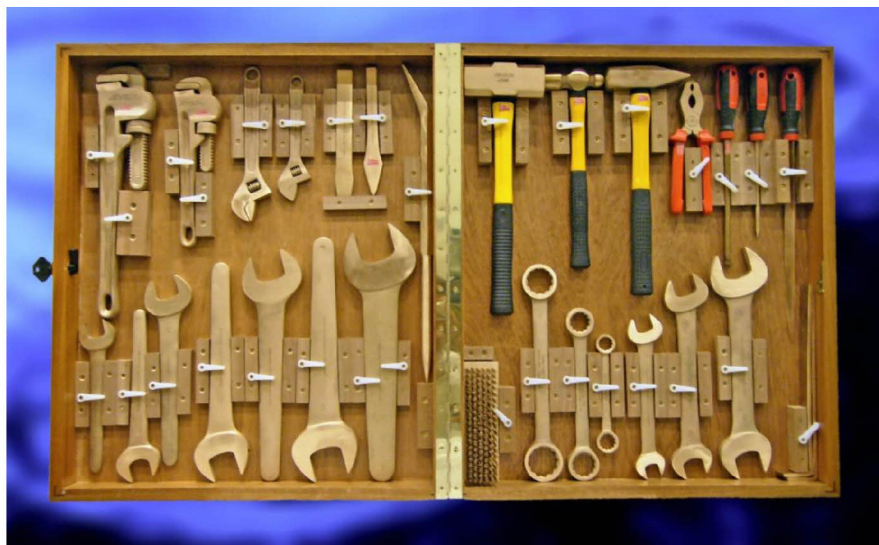


# Hand Safety Week – Tool selection

**Richmond Refinery  
Tuesday**

**9/22/09**

***Attention: Please turn  
on speakers for audio  
attachment on the last  
slide!***





# Hand Safety Statistics.

Hand injuries are the single largest category of injuries at Chevron

## **For Example**

- YTD June 25, 2009, 7.4% of our Recordable Injuries have been injuries to the hand in Global Downstream.
- Richmond has 4 Recordable hand injuries in 2009 – 2 Employee, 2 Contractor



# Tool Selection

- Select the right size of tool for the job.
  - Don't use "cheaters"
  - Do not use damaged tools that have been taken out of service. Use TIF/LPSA.
- Use tools for their intended purpose: Don't use a pipe wrench, channel locks, a bar, a piece of wood, or an axe instead of the correct tool. Never use a spanner as a hammer, it may weaken it, and cause it to fracture.
- Always clean and inspect tools before and after use; replace damaged tools; and return tools to designated location.
- When working on or from an elevated surface (ladder, truck, scaffold), ensure that your tools are secure. Falling tools can cause serious injury.
- Always carry your tools correctly, and never put sharp or pointed tools in your pocket. If you are lifting your tools in a bag on a rope, make sure the bag is tested and certificated as safe to lift.
- Never climb a ladder with your toolbag over your shoulder.
- When carrying hand tools, always point the sharp edge toward the ground.

# Tips for Selecting Hand Tools

For double-handled pinching, gripping, or cutting tools: Select a tool with handles that are spring-loaded to return the handles to the open position.



Select a tool without sharp edges or finger grooves on the handle. (Why? Not all hands are the same size – pre-set finger grooves can add to the stress on the hand when the tool is being used.)



## Tips for Selecting Hand Tools

For tasks requiring high force: Select a tool with a handle length longer than the widest part of your hand – usually 4 inches to 6 inches.

Prevent contact pressure by making sure the end of the handle does not press on the nerves and blood vessels in the palm of your hand.

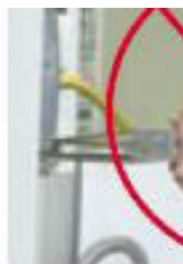
If the handle is too short, the end will press against the palm of your hand and may cause an injury.



# Tips for Selecting Hand Tools

Select a tool with an angle that allows you to work with a straight wrist.

Tools with bent handles are better than those with straight handles when the force is applied horizontally (in the same direction as your straight forearm and wrist).



# Screwdrivers



- Most screwdrivers are *not* designed to be used on electrical equipment. Use an insulated screwdriver for electrical work.
- Do not hold an object in the palm of one hand and press a screwdriver into it; place the object on a bench or table.
- Never hammer or chisel with a screwdriver.
- Never use a screwdriver as a lever.
- Never use a screwdriver with a broken handle, a bent or burred blade, etc.



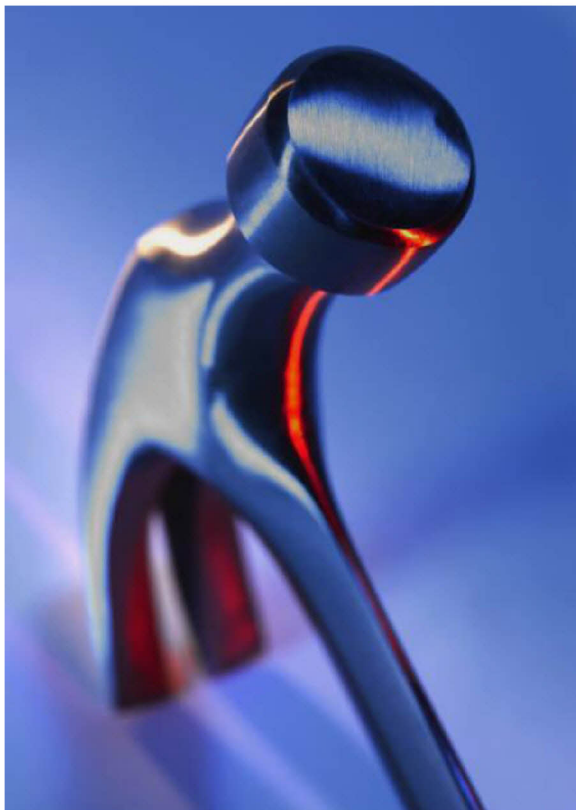
## Channel Locks/Pliers

- Do not use pliers as a substitute for hammers, wrenches, pry bars, etc.
- Use insulated pliers when doing electrical work.
- Inspect pliers frequently for teeth integrity and to make certain that they are free of breaks or cracks.
- Use the right type of pliers for the specific task – adjustable, locking (Vise Grip®), standard - bolt size fit, or pipe wrench.
- Always consider where your hands would go if your pliers slipped





# Hammers



Always:

- Use the correct hammer for the work/task (brass, rubber, mallet, ball pin, sledge, rock).
- Wear safety glasses/goggles and faceshield when using a hammer.
- Use the claw portion of a hammer properly (to remove nails and not as a pick or awl).
- Have an unobstructed view and swing, keep a tight grip
- Use something other than your hand to hold a nail, chisel, punch.
- Check for defects on the handle and head before using it.
- Replace immediately if the head shows signs of mushrooming.
- Tighten loose handles immediately with the proper wedges; never use nails or staples.
- Replace hammers with loose steel or fiberglass handles immediately.

# Wrenches/Spanners



- Ensure that wrenches are Dual stainless steel,
- Always wear gloves when using a wrench or spanner.
- Always select the correct size wrench/ spanner for the job.
- Never use a pipe wrench as a handle extension (cheater).
- Beware, too much leverage can ruin a tool and cause injury.

To avoid slips:

- Stand in a balanced position
- Always pull on the wrench
- Never push against the fixed jaw
- **Whenever possible, avoid use of an adjustable or open ended wrench**
- **Use closed end wrench/spanner to avoid slipping.**

# Chisels/Punches/Wedges

- Always wear face shield and impact goggles when using a chisel, punch, wedge, or striking tool.
- Drive chisels outward and away from your body.
- Do not use chisels to pry.
- Keep edges sharp for the most effective work. Protect the edge of the tool when not in use.
- Use the proper hammer, when using a chisel.



RI – 314 7.2 Other Head and Face Protection  
The following equipment must be worn as indicated:

2. Face Shield and Impact Goggles, where the face will be exposed to flying particles produced in breaking, buffing, caulking, drilling, grinding, striking tools, input wrenches, etc., hard materials. A face shield and safety glasses must be worn when using striking tools (normal carpentry activities are excluded).



## Sharing Personal Stories - [REDACTED]

[REDACTED] pinched his finger while unloading a spool. Listen to [REDACTED] story.

Safety Reminder: Use the right tool for the job.

